

Amendments to the Specification

Please add the following new heading before paragraph [0002]:

BACKGROUND

Please delete paragraph [0002].

Please add the following new heading before paragraph [0005]:

SUMMARY OF THE INVENTION

Please replace paragraph [0005] with the following amended paragraph:

It is, ~~therefore, the~~ an object of the present invention to devise an axial piston machine which will overcome some or all of these disadvantages.

Please delete the eight paragraphs [0006] through [0013].

Please add the following new paragraphs [0016.1] and [0016.2] after paragraph [0016]:

[0016.1] An axial piston machine according to the present invention is characterized in that a first spherical recess is disposed within the bridge of the brace, that is, in the inner radial region of the piston brace.

[0016.2] Moreover, the spherical running surfaces of the piston shoes in the brace can seamlessly merge into the first spherical recess in the bridge of the brace, and the spherical running surfaces and the first spherical recess can preferably have equal sphere radii. Also preferred is a first spherical recess which can be processed by and during the machining of the piston shoe bearing surfaces, or fully produced by this machining process. Preferably, the bridge of the brace is adapted, on its inner side, to the contour of the tilting ring or tilting plate by a second spherical recess of larger radius outside the first spherical recess. In accordance with the present invention, the second spherical recess allows the bridge of the brace to be shifted as close as possible to the tilting ring or tilting plate. This reduces the bending load on the brace by shorter lever arms. The first spherical recess only slightly reduces the stiffness of the brace,

because the first spherical recess is located very close to the bending line. This is made possible because the second spherical recess shifts the bending line of the brace so close to the tilting plate or tilting ring that the stiffness against bending during the suction movement is only slightly reduced compared to a brace without a first spherical recess. Because of this, less material and installation space are needed, which reduces costs.

Please replace paragraph [0017] with the following amended paragraph:

[0017] ~~The objective is also achieved by~~ The present invention furthermore provides an axial piston machine in which the outer side, as a sliding surface, of the brace has at least one opening to the inner radial region of the brace which faces the tilting plate or tilting ring. Preferably, the at least one opening serves to supply lubricant to the sliding surface, because the sliding surface is located in the peripheral region covered by the piston brace and, therefore, can only with difficulty be supplied with the lubricant contained in the refrigerant in the drive mechanism housing.

Please add the following new heading before paragraph [0021]:

BRIEF DESCRIPTION OF THE DRAWINGS

Please add the following new heading before paragraph [0038]:

DETAILED DESCRIPTION

Please replace paragraph [0047] with the following amended paragraph:

[0047] In Figure 9, spherical recesses 80 and 81 in the piston brace are shown in four views. Figure 9a is a view of the inner side of the brace 44 or 5, respectively, showing the first spherical cap-shaped depression, that is, spherical recess 80, in the bridge of brace 44, 5 and a second spherical contour 81, which can occupy the entire inner side of the brace. Figure 9b shows section B-B of Figure 9a. Front bearing surface 62 for the front piston shoe can be seen within the cut brace 44 or 5. In cut region 88 of the piston brace ring, both the raised sliding regions 25 of Figure 6, which serve as a contact surface with housing contour 86, and first spherical recess 80 can be seen. It can also be clearly seen that second spherical recess 81 provides sufficient

clearance from tilting ring contour 84 and the envelope generated by its pivotal movement, and that section B-B follows the contour of tilting ring 84 and housing 86.